### Arizona Department of Transportation

# MARICOPA COUNTY TRANSPORTATION EXCISE TAX Forecasting Process & Results FY 2008-2026









**Financial Management Services** 

# MARICOPA COUNTY TRANSPORTATION EXCISE TAX OFFICIAL FORECAST UPDATE RISK ANALYSIS OF EXPECTED VALUES

#### **Introduction**

In 1985, the voters of Maricopa County approved Proposition 300 to establish a one-half cent transportation excise (sales) tax for construction of a regional freeway system within the county. The half cent sales tax was approved for a period of 20 years and ended on December 31, 2005.

On November 2, 2004, Maricopa County's voters approved Proposition 400 which extended the one-half cent sales tax for another 20 years through December 31, 2025. The sales tax extension will be used for construction of new freeways, widening of existing freeways and highways, improvements to the arterial street system, regional bus service and other special transportation services, and high capacity transit services such as light rail, bus rapid transit and express buses.

This document contains the official forecast of expected values for the Maricopa County Transportation Excise Tax for the period FY 2007-2026 developed by the Arizona Department of Transportation in cooperation with the Maricopa Association of Governments, Valley Metro and Valley Metro Rail.

#### **Background**

Since 1986, the Arizona Department of Transportation (the Department) has used a comprehensive regression-based econometric model to estimate Transportation Excise Tax revenues for Maricopa County. These revenues, which flow into the Regional Area Road Fund (RARF), are the major funding source for the Maricopa County Freeway Program.

The revenue forecast is highly dependent on estimates of independent variables. In order to deal with variability between estimated and actual values, the Department introduced the Risk Analysis Process (RAP) in 1992. The RAP relies on probability analysis and the independent evaluation of the model's variables by an expert panel of economists. The process results in a series of forecasts, with specified probabilities of occurrence, rather than a single or "best guess" estimate.

Enhanced forecasting accuracy was achieved in July 1996, when Hickling Lewis Brod Inc. (HLB) working in conjunction with Dr. Dennis Hoffman of Arizona State University, incorporated economic data and independent variables which were not included in the 1986 model.

In September 2005, the Department had HDR/HLB re-examine the structure of the RARF modal and re-evaluate the set of explanatory variables used in the production of the RARF revenue forecasts. Three new variables (U. S. Housing Starts, Sky Harbor Passenger Traffic and Maricopa County Total Non-Farm Employment Growth) were added to the existing list of variables used in the RARF regression equations. The independent variables contained in the updated model are:

- Maricopa County real income growth per capita
- Maricopa County population growth
- Maricopa County construction employment growth
- U. S. housing start growth
- Sky Harbor passenger traffic growth
- Maricopa County total non-farm employment growth
- Phoenix Consumer Price Index (CPI)
- Prime interest rate.

#### Risk Analysis Panel

The Risk Analysis Process (RAP) relies heavily on the judgments of an expert panel of economists to provide information critical to the forecasting process. In August 2007, an expert panel of twelve economists representing public, private, and academic sectors provided their individual estimates of the model's independent variables and comments on the future economic outlook.

#### **Model Results**

Based on the panel's inputs, the RAP model produced a mean forecast of \$14,067.3 million for the period FY 2008-2026. The mean forecast average compound growth rate (CGR) was 6.6 percent.

The Official Forecast for the period FY 2008-2026 totals \$14,037.6 million with an average compound growth rate of 6.6 percent. The Official Forecast is \$408.4 million lower than last year's forecast, due mainly to the panel members less optimistic near term view of several inputs variables. Compared to last year's forecast, the RAP panel members expect slower growth in the Maricopa County economy in FY 2008 through FY 2010 before returning to a more normal growth in FY 2011.

The Official Forecast incorporates the 50 percent confidence interval for each year of the forecast except for FY 2008. The FY 2008 forecast of \$408.7 million was developed by ADOT staff independently of the econometric model using time series techniques, historical and projected growth rates from the model.

		orecast Results s in Millions)	
Fiscal	Mean	Official	Confidence
<u>Year</u>	<b>Forecast</b>	<b>Forecast</b>	Level
2008	\$408.2	\$408.7	N/A
2009	429.4	429.5	50%
2010	455.8	455.9	50%
2011	486.2	485.8	50%
2012	519.0	518.8	50%
2013	554.5	554.2	50%
2014	592.1	591.3	50%
2015	632.7	630.7	50%
2016	675.8	674.1	50%
2017	721.9	719.6	50%
2018	770.9	768.9	50%
2019	823.2	820.3	50%
2020	878.4	876.4	50%
2021	937.3	936.3	50%
2022	1,000.0	997.8	50%
2023	1,067.8	1,066.4	50%
2024	1,139.6	1,137.8	50%
2025	1,216.8	1,211.0	50%
2026	<u>757.7</u>	<u>754.1</u>	50%
Total	\$14,067.3	\$14,037.6	
Average CGR	6.6%	6.6%	

Note: Amount in current dollars.

Totals may not add due to individual rounding.

For comparison purposes, the November 2006 and September 2007 Official Forecasts are shown below:

FY 2008 Comparative Forecast (Dollars in Millions)									
Fiscal	Nov. 06 Official	Sept. 07 Official							
<b>Year</b>	<b>Forecast</b>	<b>Forecast</b>	<b>Difference</b>						
2008	\$418.7	\$408.7	(\$10.0)						
2009	\$444.6	429.5	(15.1)						
2010	\$473.6	455.9	(17.7)						
2011	\$505.4	485.8	(19.6)						
2012	\$539.3	518.8	(20.5)						
2013	\$576.3	554.2	(22.1)						
2014	\$614.7	591.3	(23.4)						
2015	\$655.0	630.7	(24.3)						
2016	\$698.2	674.1	(24.1)						
2017	\$745.4	719.6	(25.8)						
2018	\$793.5	768.9	(24.6)						
2019	\$846.0	820.3	(25.7)						
2020	\$902.2	876.4	(25.8)						
2021	\$960.6	936.3	(24.3)						
2022	\$1,022.1	997.8	(24.3)						
2023	\$1,088.8	1,066.4	(22.4)						
2024	\$1,159.7	1,137.8	(21.9)						
2025	\$1,234.8	1,211.0	(23.8)						
2026	<u>\$767.1</u>	<u>754.1</u>	( <u>13.0</u> )						
Total	\$14,446.0	\$14,037.6	(\$408.4)						
Average CGR	6.6%	6.6%							

Note: Amount in current dollars.

Totals may not add due to individual rounding.

#### **Summary**

The FY 2008-2026 Official Forecast totals \$14,037.6 million, a decrease of \$408.4 million over last year's forecast. The \$408.4 million decrease in revenue reflects the RAP panel members less optimistic view of the growth in Maricopa County Real Per Capita Income, Sky Harbor Passenger Traffic and Total Non-Farm Employment. In addition, the panel was concerned about a higher Prime Rate and Phoenix CPI. Construction Employment growth rate is expected to be lower until FY 2012 and then remain flat thereafter. The panel estimates the Population growth rate to be slightly lower every year except in FY 2011. In the near term, the FY 2008 RARF revenues are expected to continue to grow but at a slower rate in spite of housing and credit market concerns.

#### **Supplementary Information**

The remainder of this report presents supplementary information on the RAP model, the values of the independent variables forecast by the expert panel, and detailed results of the Risk Analysis Process.

### RARF Official Revenue Forecast With Category Detail by Fiscal Year

(Current Dollars in Millions)

Fiscal Year	Retail	Contracting	Utilities	Restaurant/ Bar	Rental Real Property	Rental Personal Property	Other	Total
2008	\$193.4	\$73.9	\$29.1	\$35.7	\$39.7	\$16.2	\$20.7	\$408.7
2009	211.8	64.6	32.3	37.4	43.7	17.2	22.5	429.5
2010	225.8	66.5	33.7	40.0	47.7	18.4	23.8	455.9
2011	241.1	69.6	35.1	42.9	52.2	19.7	25.2	485.8
2012	257.8	73.8	36.6	45.9	57.1	21.0	26.6	518.8
2013	275.5	78.7	38.0	49.2	62.3	22.4	28.1	554.2
2014	294.2	83.5	39.6	52.6	67.8	23.9	29.7	591.3
2015	315.0	87.6	41.1	56.4	73.6	25.6	31.4	630.7
2016	336.8	93.8	42.7	60.2	80.4	27.2	33.0	674.1
2017	359.3	100.4	44.3	64.4	87.3	28.9	35.0	719.6
Total: 08-17	\$2,710.7	\$792.4	\$372.5	\$484.7	\$611.8	\$220.5	\$276.0	\$5,468.6

Note: Totals may not add due to individual rounding.

#### RARF TOTAL TAX REVENUE RISK ANALYSIS RESULTS

(Current Dollars in Millions)

Fiscal Year	Mean	10%	20%	30%	40%	50%	60%	70%	80%	90%
2008	\$408.2	\$430.9	\$424.8	\$418.1	\$412.7	\$407.5	\$402.5	\$397.5	\$392.7	\$386.7
2009	429.4	464.5	456.0	445.8	436.4	429.5	420.5	412.7	405.0	395.4
2010	455.8	501.2	490.2	476.4	465.1	455.9	444.2	434.5	424.3	412.0
2011	486.2	541.4	526.7	510.3	497.3	485.8	473.4	460.2	448.3	433.7
2012	519.0	582.8	566.1	545.9	531.3	518.8	503.9	489.9	475.1	458.6
2013	554.5	624.7	607.6	585.6	567.9	554.2	537.1	523.3	505.7	485.6
2014	592.1	670.9	650.5	626.3	606.4	591.3	572.9	556.7	539.0	516.7
2015	632.7	720.2	698.3	670.3	648.2	630.7	611.2	593.4	574.5	549.1
2016	675.8	772.8	745.9	716.1	692.7	674.1	653.3	633.3	611.4	584.3
2017	721.9	830.8	798.0	765.2	740.5	719.6	697.1	674.9	651.4	621.7
2018	770.9	888.9	853.9	817.7	789.9	768.9	743.8	718.7	695.4	663.5
2019	823.2	952.6	913.1	874.2	844.1	820.3	793.6	767.4	740.4	705.3
2020	878.4	1,018.4	975.3	932.6	901.5	876.4	846.9	818.0	788.8	750.6
2021	937.3	1,086.2	1,038.8	996.1	963.1	936.3	903.4	872.4	840.8	801.3
2022	1,000.0	1,162.3	1,110.6	1,063.4	1,027.8	997.8	962.0	930.1	897.5	851.5
2023	1,067.8	1,245.4	1,188.9	1,135.5	1,096.4	1,066.4	1,028.0	991.8	953.0	907.9
2024	1,139.6	1,329.0	1,271.3	1,214.8	1,170.2	1,137.8	1,096.0	1,058.3	1,016.7	965.7
2025	1,216.8	1,420.7	1,361.0	1,299.3	1,250.3	1,211.0	1,167.2	1,129.0	1,083.3	1,032.9
2026	1,299.0	1,523.1	1,455.7	1,387.3	1,334.4	1,292.7	1,247.2	1,204.7	1,155.0	1,094.4

#### RARF Official Revenue Forecast Revenue Distribution

(Current Dollars in Millions)

	Regional Area Ro	oad Fund (RARF) /1	Public Transportation	
Fiscal	Freeways	Arterial Streets	Fund	
Year	(56.2%)	(10.5 %)	(33.3%)	Total
2008	\$229.7	\$42.9	\$136.1	\$408.7
2009	241.4	45.1	143.0	429.5
2010	256.2	47.9	151.8	455.9
2011	273.0	51.0	161.8	485.8
2012	291.5	54.5	172.8	518.8
2013	311.5	58.2	184.5	554.2
2014	332.3	62.1	196.9	591.3
2015	354.5	66.2	210.0	630.7
2016	378.8	70.8	224.5	674.1
2017	404.4	75.6	239.6	719.6
2018	432.1	80.7	256.0	768.9
2019	461.0	86.1	273.2	820.3
2020	492.5	92.0	291.8	876.4
2021	526.2	98.3	311.8	936.3
2022	560.8	104.8	332.2	\$997.8
2023	599.3	112.0	355.1	1,066.4
2024	639.4	119.5	378.9	1,137.8
2025	680.6	127.2	403.2	\$1,211.0
2026 /2	423.8	79.2	251.1	754.1
TOTALS	\$7,889.1	\$1,474.0	\$4,674.5	\$14,037.6

Note: 1/ The Regional Public Transportation Authority received a portion of the excise tax funds for transit cost which is adjusted annually by the GDP price deflator. Beginning July 1, 2005, this transfer from RARF is divided equally between MAG and the Public Transportation Fund for planning and administering the regional transportation plan. 2/ Reflects the end of the one-half cent transportation excise tax extension on December 31, 2025. Totals may not add due to rounding.

#### **Distribution**

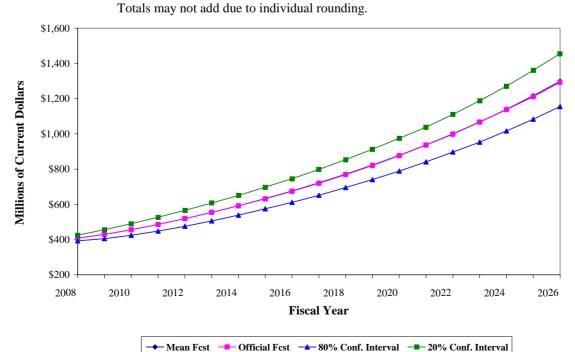
Per Laws 2004, Chapter 2 (HB 2456), the sales tax extension will be distributed as follows:

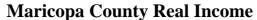
- 1. 56.2 percent to the Regional Area Road (RARF) fund for freeways and other routes in the state highway systems, including capital expense and maintenance.
- 2. 10.5 percent to the RARF fund for major arterial streets and intersection improvements, including capital expense and implementation studies.
- 3. 33.3 percent to the public transportation fund for:
  - (a). Capital costs, maintenance and operation of public transportation classifications.
  - (b). Capital costs and utility relocation costs associated with a light rail public transit system.

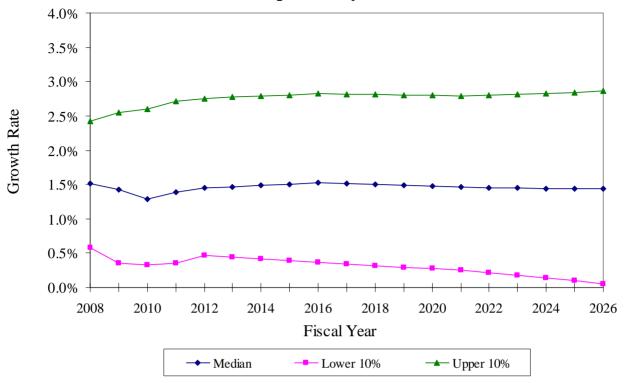
### Official Forecast Results (Current Dollars in Millions)

Fiscal	Mean	Official	80% Conf.	20% Conf.
Year	Forecast	Forecast	Interval	Interval
2008	\$408.2	\$408.7	\$392.7	\$424.8
2009	429.4	429.5	405.0	456.0
2010	455.8	455.9	424.3	490.2
2011	486.2	485.8	485.8 448.3	
2012	519.0	518.8	475.1	566.1
2013	554.5	554.2	505.7	607.6
2014	592.1	591.3	539.0	650.5
2015	632.7	630.7	574.5	698.3
2016	675.8	674.1	611.4	745.9
2017	721.9	719.6	651.4	798.0
2018	770.9	768.9	695.4	853.9
2019	823.2	820.3	740.4	913.1
2020	878.4	876.4	788.8	975.3
2021	937.3	936.3	840.8	1,038.8
2022	1,000.0	997.8	897.5	1,110.6
2023	1,067.8	1,066.4	953.0	1,188.9
2024	1,139.6	1,137.8	1,016.7	1,271.3
2025	1,216.8	1,211.0	1,083.3	1,361.0
2026 /1	757.7	754.1	673.8	849.2
Total	\$14,067.3	\$14,037.6	\$12,717.3	\$15,526.2

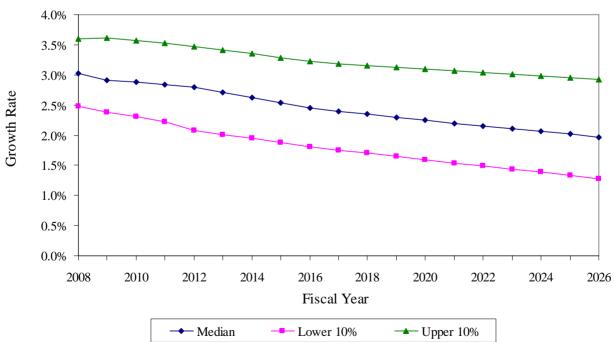
Note: 1/ FY 2026 totals are adjusted to reflect the transportation excise tax expiration on December 31, 2025.







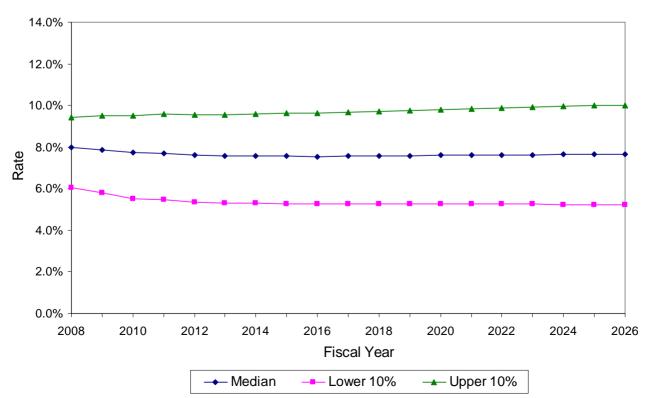
### **Maricopa County Population**



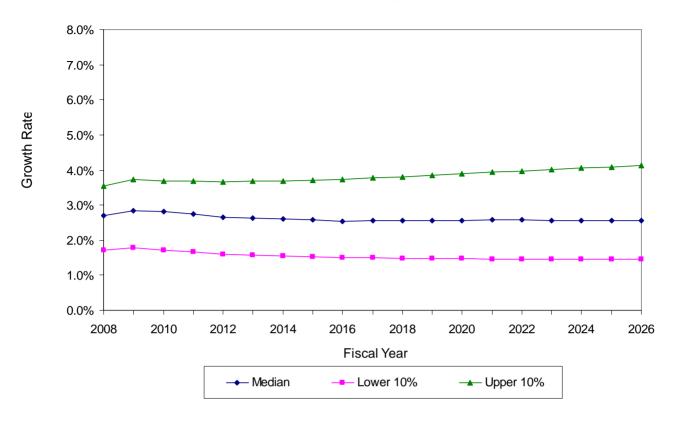
#### **Maricopa County Construction Employment**



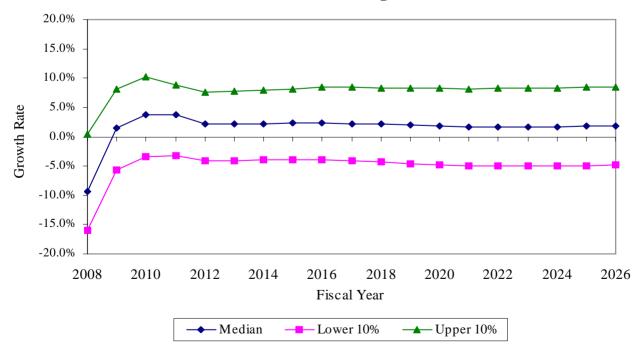
#### **Prime Interest Rate**



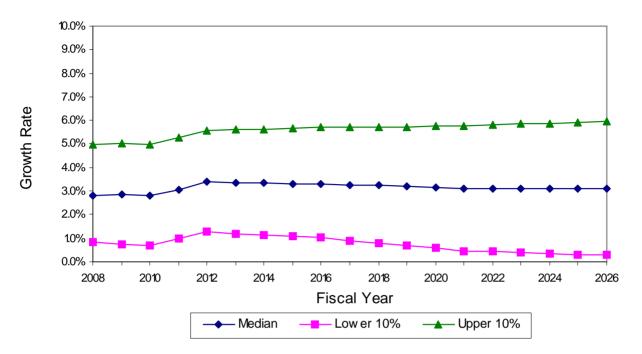
#### **Phoenix CPI**



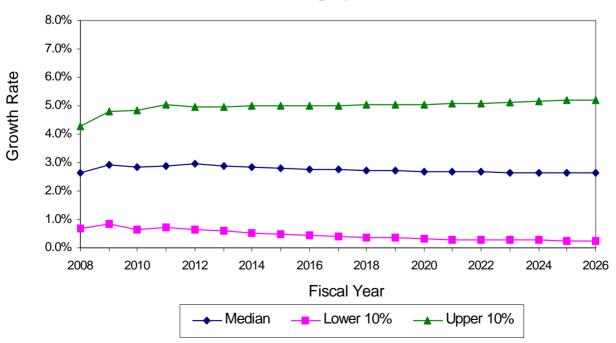
### **U.S. Housing Start**



#### **Sky Harbor Passenger Traffic**



### Maricopa County Total Non-Farm Employment



### **Mean Panelist Data Values**

	Real		Construction	Prime		U.S.	Sky Harbor	Total Non-Farm
	Income	Population	Employment	Interest	Phoenix	Housing	Passenger	Employment
	Growth /1	Growth /1	Growth /1	Rate	CPI Growth	Start Growth	Traffic Growth	Growth /1
FY 2008								
Upper 10%	2.43%	3.59%	1.95%	9.44%	3.55%	0.44%	4.97%	4.29%
Lower 10%	0.58%	2.49%	-8.52%	6.05%	1.72%	-16.07%	0.83%	0.68%
Median	1.51%	3.03%	-3.96%	7.99%	2.71%	-9.36%	2.81%	2.63%
FY 2009								
Upper 10%	2.54%	3.61%	5.12%	9.52%	3.74%	8.08%	5.04%	4.81%
Lower 10%	0.35%	2.38%	-5.44%	5.79%	1.77%	-5.66%	0.72%	0.84%
Median	1.43%	2.91%	-0.75%	7.87%	2.85%	1.45%	2.84%	2.91%
FY 2010								
Upper 10%	2.60%	3.57%	7.40%	9.51%	3.68%	10.19%	5.00%	4.83%
Lower 10%	0.33%	2.30%	-3.23%	5.51%	1.71%	-3.40%	0.70%	0.66%
Median	1.29%	2.88%	1.75%	7.73%	2.82%	3.76%	2.82%	2.84%
FY 2011								
Upper 10%	2.71%	3.53%	8.20%	9.58%	3.68%	8.87%	5.27%	5.03%
Lower 10%	0.36%	2.22%	-2.72%	5.49%	1.66%	-3.16%	1.00%	0.71%
Median	1.39%	2.84%	2.98%	7.69%	2.75%	3.83%	3.05%	2.89%
FY 2012								
Upper 10%	2.75%	3.47%	8.32%	9.54%	3.66%	7.62%	5.56%	4.97%
Lower 10%	0.47%	2.08%	-2.33%	5.35%	1.60%	-4.08%	1.26%	0.64%
Median	1.45%	2.80%	2.83%	7.60%	2.66%	2.13%	3.38%	2.94%
FY 2016								
Upper 10%	2.82%	3.22%	8.58%	9.65%	3.73%	8.52%	5.69%	4.99%
Lower 10%	0.36%	1.81%	-1.79%	5.27%	1.50%	-3.88%	1.02%	0.43%
Median	1.53%	2.45%	3.40%	7.55%	2.54%	2.42%	3.30%	2.77%
FY 2021								
Upper 10%	2.79%	3.07%	8.85%	9.85%	3.94%	8.14%	5.76%	5.06%
Lower 10%	0.25%	1.54%	-1.97%	5.27%	1.47%	-5.03%	0.46%	0.29%
Median	1.46%	2.20%	3.40%	7.63%	2.57%	1.63%	3.12%	2.68%
FY 2026								
Upper 10%	2.86%	2.93%	8.83%	10.03%	4.12%	8.54%	5.95%	5.22%
Lower 10%	0.06%	1.28%	-2.08%	5.22%	1.46%	-4.87%	0.28%	0.24%
Median	1.43%	1.97%	3.44%	7.66%	2.56%	1.81%	3.12%	2.63%

All data in the above table are percentage growth rates with the exception of prime rates which are nominal rates.

<sup>/1</sup> Data for Maricopa County

		Per Ca	pita Inco	me Grov	wth Rate			
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	2.50%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Lower 10%	0.60%	0.50%	0.30%	0.10%	0.10%	0.10%	0.10%	0.10%
Median	1.50%	1.30%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Panelist 2								
Upper 10%	3.00%	3.50%	3.70%	3.70%	3.50%	3.50%	3.20%	3.40%
Lower 10%	1.10%	1.10%	1.00%	0.80%	0.70%	0.50%	0.50%	-0.11%
Median	1.90%	2.10%	2.30%	2.10%	2.10%	1.80%	1.30%	1.50%
Panelist 3								
Upper 10%	2.50%	3.10%	3.20%	3.32%	3.42%	3.40%	3.40%	3.40%
Lower 10%	0.90%	0.90%	1.00%	1.00%	0.90%	0.82%	0.50%	-0.11%
Median	1.70%	2.20%	2.20%	2.10%	2.10%	2.20%	2.00%	1.70%
Panelist 4								
Upper 10%	3.00%	3.20%	3.40%	3.50%	3.50%	3.58%	3.60%	3.80%
Lower 10%	0.80%	0.78%	0.60%	0.60%	0.60%	0.50%	0.30%	0.20%
Median	1.80%	2.00%	2.20%	2.20%	2.10%	2.10%	2.00%	1.80%
Panelist 5								
Upper 10%	2.80%	3.42%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Lower 10%	-0.50%	-1.00%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
Median	1.10%	1.70%	1.30%	1.20%	1.20%	1.20%	1.20%	1.20%
Panelist 6								
Upper 10%	2.70%	2.90%	2.90%	3.00%	3.10%	3.30%	3.40%	3.50%
Lower 10%	0.90%	0.50%	0.40%	0.30%	0.00%	-1.00%	-1.30%	-1.50%
Median	1.80%	1.60%	1.50%	1.50%	1.40%	1.10%	1.00%	1.00%
Panelist 7								
Upper 10%	1.70%	1.70%	1.70%	1.70%	1.50%	1.50%	1.50%	1.50%
Lower 10%	1.20%	1.20%	1.20%	1.20%	1.10%	1.10%	1.10%	1.10%
Median	1.50%	1.50%	1.50%	1.50%	1.30%	1.30%	1.30%	1.30%
Panelist 8								
Upper 10%	1.90%	2.50%	3.00%	3.00%	3.00%	3.00%	2.70%	2.70%
Lower 10%	0.20%	0.50%	1.00%	1.00%	1.00%	0.70%	0.50%	0.00%
Median	1.60%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.60%
Panelist 9								
Upper 10%	1.70%	1.00%	1.30%	1.30%	1.50%	2.00%	2.00%	2.00%
Lower 10%	-0.30%	-1.20%	-2.00%	-2.00%	-0.50%	0.00%	0.00%	0.00%
Median	0.70%	-1.00%	-1.00%	-0.90%	-0.10%	1.00%	1.00%	1.00%
Panelist 10								
Upper 10%	2.50%	2.00%	1.50%	2.50%	3.00%	3.00%	3.00%	3.00%
Lower 10%	1.00%	0.00%	-0.50%	0.50%	1.00%	1.00%	1.00%	1.00%
Median	N/A	1.00%	0.00%	1.50%	2.00%	2.00%	2.00%	2.00%
Panelist 11								
Upper 10%	2.00%	2.00%	1.80%	1.70%	1.80%	1.80%	1.80%	1.80%
Lower 10%	0.80%	0.60%	0.40%	0.20%	0.20%	0.20%	0.00%	0.00%
Median	1.50%	1.40%	1.20%	1.10%	1.00%	1.30%	1.40%	1.50%
Panelist 12								
Upper 10%	2.80%	2.90%	2.90%	3.00%	2.90%	3.00%	3.10%	3.40%
Lower 10%	0.20%	0.30%	0.30%	0.40%	0.30%	0.20%	0.10%	-0.20%
Median	1.50%	1.60%	1.60%	1.70%	1.60%	1.60%	1.60%	1.60%

N/A means Not Available

	Marico	pa Coui	nty Pop	ulation	Growth	n Rate		
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	3.80%	3.70%	3.80%	3.70%	3.70%	3.60%	3.50%	3.50%
Lower 10%	2.80%	2.80%	2.80%	2.50%	2.50%	2.40%	2.20%	2.00%
Median	3.20%	3.10%	3.20%	3.20%	3.20%	3.00%	2.80%	2.80%
Panelist 2							_	
Upper 10%	3.67%	3.47%	3.37%	3.27%	3.17%	2.95%	2.76%	2.63%
Lower 10%	2.80%	2.70%	2.40%	2.20%	1.90%	1.60%	1.20%	1.00%
Median	3.30%	3.00%	2.80%	2.70%	2.50%	2.20%	1.90%	1.60%
Panelist 3								
Upper 10%	3.20%	3.30%	3.40%	3.50%	3.40%	3.00%	2.90%	2.90%
Lower 10%	2.00%	2.00%	2.20%	2.20%	2.00%	1.80%	1.80%	1.80%
Median	2.80%	2.80%	3.00%	3.00%	2.80%	2.40%	2.30%	2.20%
Panelist 4								
Upper 10%	3.60%	3.70%	3.80%	3.80%	3.80%	3.40%	3.20%	3.00%
Lower 10%	2.90%	2.70%	2.70%	2.60%	2.50%	2.00%	1.70%	1.50%
Median	3.30%	3.20%	3.30%	3.20%	3.10%	2.70%	2.40%	2.20%
Panelist 5								
Upper 10%	3.67%	3.47%	3.37%	3.27%	3.17%	2.95%	2.76%	2.63%
Lower 10%	2.33%	2.13%	2.03%	1.93%	1.83%	1.45%	1.04%	0.57%
Median	2.80%	2.55%	2.30%	2.05%	N/A	1.55%	1.30%	1.05%
Panelist 6								
Upper 10%	3.60%	3.80%	3.60%	3.40%	3.40%	3.30%	3.30%	3.40%
Lower 10%	2.40%	2.10%	2.00%	1.90%	1.80%	1.50%	1.40%	1.00%
Median	3.00%	3.00%	2.90%	2.70%	2.60%	2.50%	2.30%	2.10%
Panelist 7								
Upper 10%	3.50%	3.30%	3.20%	3.10%	3.00%	2.70%	2.40%	2.10%
Lower 10%	2.50%	2.30%	2.20%	2.10%	2.00%	1.70%	1.40%	1.10%
Median	3.00%	2.80%	2.70%	2.60%	2.50%	2.20%	1.90%	1.60%
Panelist 8								
Upper 10%	3.50%	3.80%	3.80%	3.80%	3.80%	3.50%	3.00%	2.50%
Lower 10%	2.50%	2.60%	2.50%	2.50%	2.30%	2.00%	1.50%	1.00%
Median	3.00%	3.10%	3.30%	3.40%	3.30%	3.00%	2.50%	2.00%
Panelist 9								
Upper 10%	4.00%	4.00%	3.80%	3.80%	3.80%	3.50%	3.50%	3.50%
Lower 10%	2.40%	2.40%	2.40%	2.40%	2.20%	2.00%	2.00%	2.00%
Median	3.00%	2.90%	2.70%	2.50%	2.40%	2.40%	2.40%	2.40%
Panelist 10								
Upper 10%	3.67%	3.47%	3.37%	3.27%	3.17%	2.95%	2.76%	2.63%
Lower 10%	2.50%	2.00%	1.70%	1.70%	1.70%	1.45%	1.04%	1.00%
Median	3.20%	2.70%	2.50%	2.70%	2.50%	2.00%	1.70%	1.50%
Panelist 11								
Upper 10%	3.40%	3.60%	3.70%	4.00%	4.00%	3.80%	3.80%	3.80%
Lower 10%	2.60%	2.50%	2.40%	2.50%	2.30%	2.20%	2.10%	2.00%
Median	2.90%	2.80%	2.90%	3.20%	3.30%	3.10%	2.90%	2.70%
Panelist 12								
Upper 10%	3.50%	3.70%	3.70%	3.50%	3.30%	3.00%	2.90%	2.60%
• •								
Lower 10%	2.10%	2.30%	2.30%	2.10%	1.90%	1.60%	1.10%	0.40%
Median	2.80%	3.00%	3.00%	2.80%	2.60%	2.30%	2.00%	1.50%

N/A means not available

Mai	ricopa Coi	unty Coi	<b>istructi</b> o	n Emplo	oyment (	rowth I	Kate	
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	0.00%	5.00%	6.00%	9.00%	10.00%	12.00%	12.00%	12.00%
Lower 10%	-8.00%	-7.00%	-6.00%	-6.00%	-6.00%	3.00%	3.00%	3.00%
Median	-4.00%	-2.00%	0.00%	0.00%	0.00%	6.00%	7.00%	7.00%
Panelist 2								
Upper 10%	-3.00%	0.00%	9.45%	9.45%	9.45%	10.50%	11.55%	10.00%
Lower 10%	-12.00%	-10.00%	-5.45%	-4.00%	0.00%	0.00%	0.00%	0.00%
Median	-10.00%	-5.00%	0.00%	2.00%	3.00%	5.00%	5.00%	5.00%
Panelist 3								
Upper 10%	2.00%	3.50%	4.00%	4.50%	4.50%	4.00%	4.00%	4.00%
Lower 10%	0.00%	0.50%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Median	1.00%	2.50%	3.50%	3.50%	3.25%	3.00%	3.00%	3.00%
Panelist 4								
Upper 10%	1.50%	5.50%	8.50%	9.00%	10.00%	10.50%	11.00%	11.00%
Lower 10%	-10.50%	-6.50%	-5.50%	-6.00%	-6.50%	-7.00%	-7.50%	-8.00%
Median	-5.50%	1.50%	2.50%	2.50%	3.00%	3.00%	3.00%	3.00%
Panelist 5								
Upper 10%	7.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Lower 10%	-15.00%	-6.00%	-6.00%	-6.00%	-6.00%	-6.00%	-6.00%	-6.00%
Median	-5.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Panelist 6	3.0070	0.0070	2.0070	2.0070	2.0070	2.0070	2.0070	2.0070
Upper 10%	5.50%	6.00%	6.50%	7.00%	7.50%	8.50%	9.00%	10.00%
Lower 10%	-6.50%	-6.00%	-5.00%	-5.50%	-4.00%	-5.00%	-5.50%	-6.00%
Median	-2.00%	-1.00%	0.00%	1.80%	2.50%	3.00%	3.00%	3.50%
Panelist 7	-2.0070	-1.0070	0.0070	1.0070	2.3070	J.0070	3.0070	3.3070
Upper 10%	0.00%	3.00%	6.00%	9.00%	7.00%	7.00%	7.00%	7.00%
Lower 10%	-6.00%	-3.00%	0.00%	3.00%	1.00%	1.00%	1.00%	1.00%
Median	-3.00%	0.00%	3.00%	6.00%	4.00%	4.00%	4.00%	4.00%
Panelist 8	-3.0070	0.0070	3.0070	0.0070	4.0070	4.0070	<b>4.</b> 00 /0	4.0070
Upper 10%	5.00%	5.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Lower 10%	-10.00%	-5.00%	-2.00%	-2.00%	-5.00%	-5.00%	-5.00%	-5.00%
Median	-3.00%	0.00%	5.00%	5.00%	5.00%	2.00%	2.00%	2.00%
Panelist 9	-3.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%
	2.000/	3.00%	2 000/	4.000/	4.000/	4.000/	4.000/	4.000/
Upper 10%	2.00%		3.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Lower 10%	-10.00%	-10.00%	-5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Median	-5.00%	-4.30%	-3.00%	1.00%	1.20%	1.80%	1.80%	2.80%
Panelist 10	5 000/	2.000/	<b>5</b> 000/	<b>5</b> 000/	5 000v	4.000/	4.000/	4.000/
Upper 10%	-5.00%	3.00%	5.00%	5.00%	5.00%	4.00%	4.00%	4.00%
Lower 10%	-15.00%	-5.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%
Median	-10.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Panelist 11	2.000/	5 000/	7.000/	0.000/	0.000/	0.000/	0.000/	0.0004
Upper 10%	3.00%	5.00%	7.00%	8.00%	9.00%	8.00%	8.00%	8.00%
Lower 10%	0.20%	0.10%	0.60%	1.00%	1.00%	1.00%	1.00%	1.00%
Median	1.00%	0.00%	3.00%	7.00%	5.00%	6.00%	5.00%	4.00%
Panelist 12								
Upper 10%	5.40%	7.40%	9.40%	9.40%	9.40%	10.50%	11.60%	12.00%
Lower 10%	-9.40%	-7.40%	-5.40%	-5.40%	-5.40%	-6.50%	-7.60%	-8.00%
Median	-2.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%

		Pri	me Inte	rest Ra	te			
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	9.50%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Lower 10%	7.00%	6.00%	5.00%	5.00%	5.00%	4.50%	4.50%	4.50%
Median	8.50%	8.20%	8.00%	7.80%	7.80%	7.50%	7.50%	7.50%
Panelist 2								
Upper 10%	10.78%	10.70%	10.70%	10.70%	10.58%	10.65%	10.85%	11.04%
Lower 10%	5.38%	5.30%	5.30%	5.30%	5.18%	4.85%	4.65%	4.46%
Median	8.08%	8.00%	8.00%	8.00%	7.88%	7.75%	7.75%	7.75%
Panelist 3								
Upper 10%	8.50%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Lower 10%	6.00%	5.50%	5.50%	6.00%	6.00%	6.00%	6.00%	6.00%
Median	7.50%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Panelist 4								
Upper 10%	9.00%	9.50%	10.00%	10.50%	10.50%	10.50%	10.80%	11.04%
Lower 10%	6.00%	5.50%	5.50%	5.30%	5.00%	4.80%	4.50%	4.46%
Median	7.80%	7.50%	7.80%	8.00%	8.00%	7.75%	7.75%	7.75%
Panelist 5								
Upper 10%	10.00%	10.25%	10.50%	10.75%	11.00%	11.25%	11.50%	11.75%
Lower 10%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Median	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Panelist 6								
Upper 10%	8.75%	9.00%	9.00%	9.50%	9.75%	10.00%	10.50%	11.50%
Lower 10%	6.00%	4.75%	4.50%	4.50%	4.25%	4.00%	3.75%	3.50%
Median	7.50%	7.00%	6.50%	6.50%	6.50%	6.00%	6.00%	6.00%
Panelist 7								
Upper 10%	9.08%	9.00%	9.00%	9.00%	8.88%	8.75%	8.75%	8.75%
Lower 10%	7.08%	7.00%	7.00%	7.00%	6.88%	6.75%	6.75%	6.75%
Median	8.08%	8.00%	8.00%	8.00%	7.88%	7.75%	7.75%	7.75%
Panelist 8								
Upper 10%	9.00%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
Lower 10%	7.00%	7.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Median	8.25%	8.25%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Panelist 9	~1 <del>_</del> ~, ,	0.20,0	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
Upper 10%	9.38%	9.68%	8.68%	8.25%	7.68%	8.44%	9.37%	9.72%
Lower 10%	7.38%	7.68%	6.68%	6.25%	5.68%	6.44%	7.37%	7.72%
Median	8.38%	8.68%	7.68%	7.25%	6.68%	7.44%	8.37%	8.72%
Panelist 10	0.5070	0.0070	7.0070	7.2370	0.0070	7.1170	0.5770	0.7270
Upper 10%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Lower 10%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Median	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Panelist 11	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
Upper 10%	8.80%	8.90%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Lower 10%	6.60%	6.50%	6.40%	6.20%	6.00%	6.00%	6.00%	5.80%
Median	8.00%	7.80%	7.80%	7.70%	7.60%	7.60%	7.60%	7.60%
Panelist 12	0.0070	7.0070	1.0070	7.7070	7.0070	7.0070	7.0070	7.0070
Upper 10%	10.50%	10.70%	10.70%	10.70%	10.60%	10.70%	10.90%	11.00%
Lower 10%	5.10%	5.30%	5.30%	5.30%	5.20%	4.90%	4.70%	4.50%
Median	7.80%	5.30% 8.00%		5.30% 8.00%	5.20% 7.90%	4.90% 7.80%		
iviedian	7.00%	0.00%	8.00%	0.00%	7.90%	7.00%	7.80%	7.80%

All data in the above table are in nominal rates.

	1	U. S. Ho	using Sta	art Grov	vth Rate			
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	0.00%	8.00%	15.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Lower 10%	-16.00%	-12.00%	-8.00%	-8.00%	-8.00%	-8.00%	-8.00%	-8.00%
Median	-10.00%	2.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Panelist 2								
Upper 10%	-2.11%	5.00%	15.39%	9.39%	6.99%	9.30%	7.90%	10.52%
Lower 10%	-17.89%	-8.00%	-0.39%	-6.39%	-8.79%	-7.90%	-10.30%	-8.72%
Median	-10.00%	-4.00%	2.00%	1.50%	-0.90%	0.70%	-1.20%	0.90%
Panelist 3								
Upper 10%	5.00%	15.00%	12.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Lower 10%	-15.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Median	-10.00%	10.00%	8.00%	7.50%	7.50%	6.00%	6.00%	6.00%
Panelist 4								
Upper 10%	0.00%	8.00%	12.00%	9.00%	8.00%	9.00%	10.00%	10.00%
Lower 10%	-15.00%	-3.00%	-5.00%	-7.00%	-7.50%	-8.00%	-10.00%	-10.00%
Median	-5.00%	2.50%	5.00%	1.00%	0.50%	0.80%	1.00%	1.00%
Panelist 5								
Upper 10%	10.00%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%
Lower 10%	-25.00%	-10.00%	-8.50%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%
Median	-20.00%	0.00%	4.00%	3.50%	3.00%	2.50%	2.00%	1.50%
Panelist 6								
Upper 10%	-1.50%	5.00%	6.50%	7.00%	8.00%	10.00%	10.00%	11.00%
Lower 10%	-16.00%	-4.00%	-2.00%	-2.50%	-3.00%	-6.00%	-8.00%	-9.00%
Median	-9.00%	2.00%	2.80%	3.00%	3.20%	3.00%	2.00%	1.50%
Panelist 7	2,00,0	,		210070	01-070	010070	_,,,,,	110 0 70
Upper 10%	-5.00%	11.00%	11.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Lower 10%	-15.00%	1.00%	1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%
Median	-10.00%	6.00%	6.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Panelist 8	10.0070	0.0070	0.0070	4.0070	4.0070	7.0070	7.0070	4.0070
Upper 10%	5.00%	15.00%	15.00%	10.00%	5.00%	5.00%	5.00%	5.00%
Lower 10%	-10.00%	-5.00%	-2.00%	-2.00%	-5.00%	-5.00%	-5.00%	-5.00%
Median	0.00%	3.50%	10.00%	5.00%	2.00%	2.00%	2.00%	2.00%
Panelist 9	0.0070	3.3070	10.0070	3.0070	2.0070	2.0070	2.0070	2.0070
Upper 10%	2.00%	2.00%	2.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Lower 10%	-15.00%	-10.00%	-10.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%
Median	-10.30%	-8.60%	-5.70%	2.40%	2.20%	2.00%	1.80%	1.80%
Panelist 10	-10.5070	-0.0070	-3.7070	2.4070	2.2070	2.0070	1.00/0	1.0070
Upper 10%	-5.00%	5.00%	5.00%	4.00%	3.00%	3.00%	3.00%	3.00%
Lower 10%	-15.00%	-5.00%	0.00%	4.00% n/a	1.00%	1.00%	1.00%	1.00%
Median	-10.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Panelist 11	-10.00%	0.00%	∠.∪∪%	2.00%	Z.UU%	Z.UU%	Z.UU%	2.00%
	2.00%	6.00%	7.00%	7.20%	7.20%	7.20%	7.20%	7.20%
Upper 10%					-6.00%	-6.00%		
Lower 10%	-12.00%	-6.00%	-6.00%	-6.00%			-6.00%	-6.00%
Median	-5.00%	2.00%	4.00%	7.00%	1.00%	0.00%	0.00%	0.00%
Panelist 12	<b>5</b> 100/	0.000/	12 000/	15 000/	0.700/	12 700/	0.100/	0.700/
Upper 10%	-5.10%	9.90%	13.90%	15.90%	8.70%	13.70%	9.10%	9.70%
Lower 10%	-20.90%	-5.90%	-1.90%	0.10%	-8.70%	-3.70%	-11.10%	-9.70%
Median	-13.00%	2.00%	6.00%	8.00%	0.00%	5.00%	-1.00%	0.00%

	Sky E	Iarbor P	assenger	r Traffic	Growth	Rate		
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	5.00%	5.50%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Lower 10%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Median	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Panelist 2								
Upper 10%	5.38%	5.60%	5.80%	6.00%	6.00%	6.30%	6.64%	7.00%
Lower 10%	0.62%	0.62%	0.62%	0.62%	0.62%	0.10%	-0.64%	-1.00%
Median	3.00%	3.20%	3.40%	3.60%	3.80%	4.00%	4.00%	4.00%
Panelist 3								
Upper 10%	4.50%	4.50%	4.00%	4.00%	4.00%	3.50%	3.50%	3.50%
Lower 10%	1.00%	1.25%	1.50%	2.00%	2.00%	2.00%	2.00%	2.00%
Median	3.00%	3.50%	3.50%	3.00%	3.00%	2.50%	2.50%	2.50%
Panelist 4								
Upper 10%	4.50%	5.00%	5.20%	5.20%	5.38%	5.50%	6.00%	6.50%
Lower 10%	1.50%	1.20%	1.00%	1.00%	0.80%	0.50%	0.00%	0.00%
Median	3.20%	3.10%	3.00%	3.00%	3.00%	2.80%	2.80%	2.80%
Panelist 5								
Upper 10%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Lower 10%	0.62%	0.62%	0.62%	0.62%	0.62%	0.10%	-0.64%	-1.00%
Median	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Panelist 6								
Upper 10%	N/A							
Lower 10%								
Median								
Panelist 7								
Upper 10%	5.38%	5.38%	5.38%	5.38%	5.38%	5.90%	6.64%	7.00%
Lower 10%	0.62%	0.62%	0.62%	0.62%	0.62%	0.10%	-0.64%	-1.00%
Median	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Panelist 8								
Upper 10%	5.50%	5.50%	5.50%	5.50%	5.50%	6.00%	6.50%	7.00%
Lower 10%	0.50%	0.50%	0.50%	0.50%	0.50%	0.20%	-0.50%	-1.00%
Median	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Panelist 9								
Upper 10%	4.00%	4.00%	4.00%	6.00%	8.00%	8.00%	6.00%	6.00%
Lower 10%	0.00%	0.00%	0.00%	2.00%	4.00%	4.00%	2.00%	2.00%
Median	2.00%	2.00%	2.50%	4.00%	6.40%	6.00%	4.00%	4.00%
Panelist 10								
Upper 10%	3.50%	3.00%	2.00%	3.00%	4.00%	4.00%	4.00%	4.00%
Lower 10%	1.00%	0.00%	0.00%	1.00%	2.00%	2.00%	2.00%	2.00%
Median	2.50%	2.00%	1.00%	2.00%	3.00%	3.00%	3.00%	3.00%
Panelist 11	2.5070	2.0070	1.00/0	2.0070	2.0070	2.0070	2.0070	2.0070
Upper 10%	5.00%	5.10%	5.20%	5.00%	5.00%	5.00%	5.00%	5.00%
Lower 10%	1.20%	1.00%	0.80%	0.60%	0.60%	0.60%	0.60%	0.60%
Median	2.20%	2.40%	2.60%	3.00%	3.00%	3.00%	3.00%	3.00%
Panelist 12	∠.∠∪/0	∠. <del>+</del> ∪/0	∠.∪∪/0	5.00/0	J.00/0	J.0070	J.0070	5.00%
Upper 10%	5.90%	5.90%	5.90%	5.90%	5.90%	6.40%	7.10%	7.50%
Lower 10%	1.10%	1.10%	1.10%	1.10%	1.10%	0.40%	-0.10%	-0.50%
Median	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%

N/A means available

	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1		2007	2010			2010		
Upper 10%	5.60%	5.70%	5.70%	5.70%	5.70%	5.50%	5.00%	5.00%
Lower 10%	0.50%	1.00%	1.00%	1.00%	1.00%	0.00%	-0.50%	-0.50%
Median	3.00%	3.10%	3.20%	3.20%	3.20%	3.00%	2.80%	2.80%
Panelist 2								
Upper 10%	4.40%	5.10%	5.40%	5.10%	5.00%	5.33%	5.52%	5.53%
Lower 10%	-1.00%	0.80%	0.20%	0.10%	0.00%	-0.13%	-0.32%	-0.33%
Median	1.50%	2.80%	3.10%	2.60%	2.50%	2.60%	2.60%	2.60%
Panelist 3								
Upper 10%	3.00%	4.00%	4.00%	4.50%	4.50%	4.50%	4.50%	4.50%
Lower 10%	0.50%	1.00%	1.00%	1.50%	1.50%	1.25%	1.25%	1.25%
Median	2.50%	3.00%	3.00%	3.50%	3.00%	2.75%	2.50%	2.50%
Panelist 4		2.5070	2.5070	2.2070	2.5570	,		
Upper 10%	5.00%	5.40%	5.70%	5.70%	5.60%	5.70%	5.60%	5.50%
Lower 10%	1.10%	0.90%	0.70%	0.50%	0.50%	0.20%	-0.10%	-0.20%
Median	3.20%	3.20%	3.40%	3.30%	3.20%	3.00%	2.80%	2.60%
Panelist 5	3.2070	3.2070	3.1070	3.3070	3.2070	5.0070	2.0070	2.0070
Upper 10%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Lower 10%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%
Median	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Panelist 6	2.3070	2.3070	2.5070	2.5070	2.3070	2.3070	2.3070	2.5070
Upper 10%	4.50%	5.50%	6.00%	6.10%	6.50%	7.00%	8.00%	10.00%
Lower 10%	1.10%	1.00%	1.00%	0.10%	0.70%	-0.50%	-1.00%	-1.50%
Median	2.70%	2.90%	3.00%	3.20%	3.30%	3.00%	2.80%	2.50%
Panelist 7	2.7070	2.9070	3.0070	3.2070	3.3070	3.0070	2.00/0	2.3070
Upper 10%	3.00%	3.50%	3.50%	3.30%	3.30%	3.00%	3.00%	3.00%
Lower 10%	2.00%	2.50%	2.50%	2.30%	2.30%	2.00%	2.00%	2.00%
Median	2.50%	3.00%	3.00%	2.80%	2.80%	2.50%	2.50%	2.50%
Panelist 8	2.3070	3.00%	3.00%	2.0070	2.0070	2.3070	2.3070	2.3070
Upper 10%	3.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Lower 10%	0.50%	1.00%	1.00%	0.50%	0.00%	-0.50%	-0.50%	-0.50%
Median	2.00%	3.50%	3.50%	3.50%	3.30%	2.50%	2.50%	2.50%
Panelist 9	2.00%	3.30%	3.30%	3.30%	3.30%	2.30%	2.30%	2.30%
Upper 10%	2.500/	4.000/	4.000/	4.000/	4.00%	2.500/	2.500/	2.500/
* *	3.50%	4.00%	4.00%	4.00%		3.50%	3.50%	3.50%
Lower 10%	0.50%	0.00%	-0.30%	1.00%	1.00%	1.00%	1.00%	1.00%
Median	3.10%	2.00%	2.20%	2.00%	3.70%	3.50%	3.25%	3.25%
Panelist 10	4.500/	2.000/	2.500/	NT/A	4.000/	4.000/	4.000/	4.000/
Upper 10%	4.50%	3.00%	2.50% 0.00%	N/A	4.00%	4.00%	4.00%	4.00%
Lower 10%	2.50%	0.50%		N/A	N/A	2.00%	2.00%	2.00%
Median	3.20%	2.50%	1.00%	2.90%	2.80%	2.70%	2.70%	2.60%
Panelist 11	4.200/	4.700/	4.600/	4.000/	<b>5</b> 000/	£ 100/	£ 100/	£ 100/
Upper 10%	4.20%	4.70%	4.60%	4.80%	5.00%	5.10%	5.10%	5.10%
Lower 10%	0.40%	0.90%	0.70%	0.50%	0.50%	0.50%	0.50%	0.50%
Median	2.80%	3.30%	3.10%	2.60%	2.50%	2.60%	2.60%	2.60%
Panelist 12	# 000°	<b>F</b> 000'	F 600	F 100	<b>F</b> 0.00	F 200	F F00.	<b>F F</b> 00:
Upper 10%	5.30%	5.80%	5.60%	5.10%	5.00%	5.30%	5.50%	5.50%
Lower 10%	0.50%	1.00%	0.60%	0.10%	0.00%	-0.10%	-0.30%	-0.30%
Median	2.60%	3.10%	3.10%	2.60%	2.50%	2.60%	2.60%	2.60%

N/A means not available

		Phoe	nix CPI	Growth	Rate			
	2008	2009	2010	2011	2012	2016	2021	2026
Panelist 1								
Upper 10%	3.60%	3.70%	3.70%	3.70%	3.70%	3.50%	3.50%	3.50%
Lower 10%	2.10%	2.30%	2.20%	2.20%	2.20%	2.10%	2.00%	2.00%
Median	3.20%	3.40%	3.30%	3.30%	3.20%	2.90%	2.80%	2.80%
Panelist 2								
Upper 10%	3.90%	4.10%	3.19%	3.19%	3.19%	3.32%	3.39%	3.50%
Lower 10%	1.80%	2.10%	1.30%	1.10%	1.10%	1.10%	0.81%	0.90%
Median	2.60%	3.00%	2.40%	2.30%	2.30%	2.10%	2.10%	2.20%
Panelist 3								
Upper 10%	4.00%	4.50%	4.25%	4.00%	4.00%	4.00%	4.00%	4.00%
Lower 10%	2.50%	2.50%	2.40%	2.50%	2.50%	2.50%	2.50%	2.50%
Median	3.50%	3.50%	3.50%	3.00%	3.03%	2.80%	2.80%	2.80%
Panelist 4								
Upper 10%	3.50%	3.30%	3.19%	3.30%	3.19%	3.50%	3.50%	3.50%
Lower 10%	1.50%	1.40%	1.40%	1.20%	1.20%	1.00%	1.00%	1.00%
Median	2.40%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%
Panelist 5								
Upper 10%	3.30%	3.40%	3.50%	3.60%	3.70%	3.80%	3.90%	4.00%
Lower 10%	1.01%	0.91%	1.01%	1.01%	1.01%	0.88%	0.81%	0.90%
Median	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Panelist 6								
Upper 10%	3.05%	2.85%	2.85%	2.75%	2.85%	3.10%	3.50%	4.00%
Lower 10%	1.55%	1.35%	1.35%	1.25%	1.35%	1.33%	1.14%	1.04%
Median	2.30%	2.40%	2.20%	2.00%	2.10%	2.20%	2.30%	2.40%
Panelist 7								
Upper 10%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Lower 10%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Median	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Panelist 8								
Upper 10%	3.80%	3.50%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%
Lower 10%	2.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Median	3.20%	3.00%	2.80%	2.80%	2.50%	2.50%	2.50%	2.50%
Panelist 9								
Upper 10%	2.31%	4.15%	4.68%	4.55%	4.20%	4.01%	4.48%	4.37%
Lower 10%	0.91%	2.45%	2.98%	3.15%	2.80%	2.61%	3.08%	2.97%
Median	1.61%	3.45%	3.98%	3.85%	3.50%	3.31%	3.78%	3.67%
Panelist 10								
Upper 10%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Lower 10%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Median	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Panelist 11		7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1
Upper 10%	3.60%	3.70%	3.80%	3.90%	4.00%	4.00%	4.00%	4.00%
Lower 10%	2.40%	2.20%	2.00%	1.90%	1.80%	1.80%	1.80%	1.80%
Median	3.10%	3.10%	3.20%	3.30%	3.20%	3.10%	3.30%	3.30%
Panelist 12		/ -		/ -		r v	/ 4	
Upper 10%	4.80%	4.50%	4.40%	4.20%	4.00%	3.90%	3.80%	3.90%
Lower 10%	2.00%	1.70%	1.60%	1.40%	1.20%	0.90%	0.60%	0.50%
Median	3.40%	3.10%	3.00%	2.80%	2.60%	2.40%	2.20%	2.20%

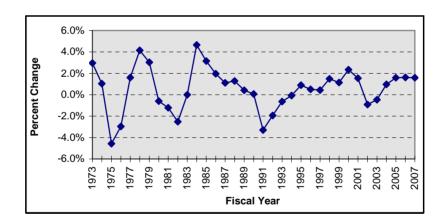
# HISTORICAL DATA GROWTH IN REAL INCOME PER CAPITA Using Phoenix CPI to Measure Inflation (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960	1970		1980	-0.6%	1990	0.1%	2000	2.3%
1961	1971		1981	-1.2%	1991	-3.3%	2001	1.5%
1962	1972		1982	-2.5%	1992	-1.9%	2002	-0.9%
1963	1973	3.0%	1983	0.0%	1993	-0.6%	2003	-0.5%
1964	1974	1.0%	1984	4.7%	1994	-0.1%	2004	1.0%
1965	1975	-4.6%	1985	3.1%	1995	0.9%	2005	1.6%
1966	1976	-3.0%	1986	2.0%	1996	0.5%	2006	1.6%
1967	1977	1.6%	1987	1.1%	1997	0.4%	2007*	1.6%
1968	1978	4.2%	1988	1.3%	1998	1.5%	2008	
1969	1979	3.0%	1989	0.4%	1999	1.1%	2009	

\*Estimate

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Historical			Std.	80% F	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	-0.5%	1.6%	1.1%	0.9%	0.1%	1.6%
10 Years	-0.9%	2.3%	1.1%	1.0%	-0.5%	1.7%
Full Period	-4.6%	4.7%	0.6%	2.0%	-2.3%	3.0%

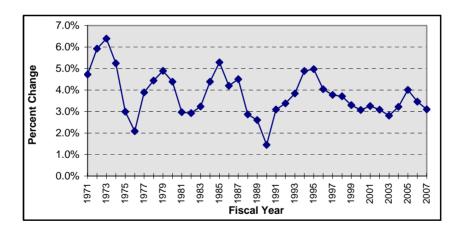
# HISTORICAL DATA MARICOPA COUNTY POPULATION GROWTH (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960	1970	3.6%	1980	4.4%	1990	1.4%	2000	3.1%
1961	1971	4.7%	1981	3.0%	1991	3.1%	2001	3.3%
1962	1972	5.9%	1982	2.9%	1992	3.4%	2002	3.1%
1963	1973	6.4%	1983	3.2%	1993	3.8%	2003	2.8%
1964	1974	5.2%	1984	4.4%	1994	4.9%	2004	3.2%
1965	1975	3.0%	1985	5.3%	1995	5.0%	2005	4.0%
1966	1976	2.1%	1986	4.2%	1996	4.0%	2006	3.5%
1967	1977	3.9%	1987	4.5%	1997	3.8%	2007*	3.1%
1968	1978	4.4%	1988	2.9%	1998	3.7%	2008	
1969	1979	4.9%	1989	2.6%	1999	3.3%	2009	

FY 2006 and prior from Bureau of Economic Analysis. \* FY 2007 to 2008 from Greater Phoenix Blue Chip. FY 2009 and after DES estimates of growth rate.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Histo	orical		Std.	80%	Range
Period	Min. Max.		Mean	Dev.	Lower	Upper
5 Years	2.8%	4.0%	3.3%	0.5%	2.9%	3.8%
10 Years	2.8%	4.0%	3.3%	0.3%	3.0%	3.7%
Full Period	1.4%	6.4%	3.8%	1.0%	2.8%	5.1%

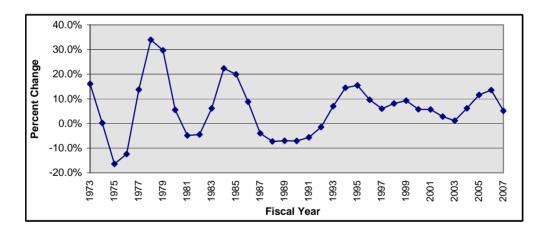
# HISTORICAL DATA MARICOPA COUNTY GROWTH IN CONSTRUCTION EMPLOYMENT (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960	1970		1980	5.5%	1990	-7.1%	2000	5.8%
1961	1971		1981	-4.9%	1991	-5.6%	2001	5.7%
1962	1972	18.9%	1982	-4.5%	1992	-1.4%	2002	2.8%
1963	1973	16.1%	1983	6.1%	1993	7.0%	2003	1.1%
1964	1974	0.2%	1984	22.3%	1994	14.5%	2004	6.1%
1965	1975	-16.4%	1985	20.0%	1995	15.4%	2005	11.6%
1966	1976	-12.4%	1986	8.8%	1996	9.6%	2006	13.6%
1967	1977	13.7%	1987	-4.0%	1997	6.0%	2007*	5.1%
1968	1978	34.0%	1988	-7.3%	1998	8.1%	2008	
1969	1979	29.7%	1989	-7.0%	1999	9.3%	2009	

FY 2005 and prior from Bureau of Economic Analysis. \* FY 2006 to 2007 from Greater Phoenix Blue Chip. FY 2008 and after ADOT staff estimates.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Histo	rical		Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	1.1%	13.6%	7.5%	5.0%	2.7%	12.8%
10 Years	1.1%	13.6%	6.9%	3.8%	2.6%	11.8%
Full Period	-16.4%	34.0%	6.3%	11.2%	-7.1%	19.4%

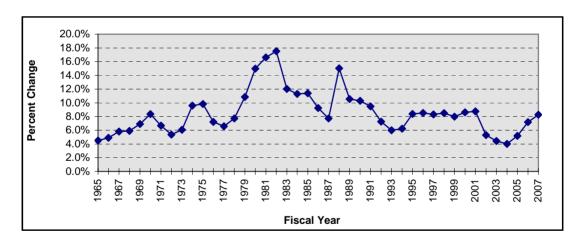
### HISTORICAL DATA PRIME INTEREST RATE

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960		1970	8.4%	1980	15.0%	1990	10.3%	2000	8.6%
1961		1971	6.7%	1981	16.6%	1991	9.5%	2001	8.7%
1962		1972	5.4%	1982	17.5%	1992	7.2%	2002	5.3%
1963		1973	6.1%	1983	12.0%	1993	6.0%	2003	4.4%
1964	4.5%	1974	9.6%	1984	11.3%	1994	6.2%	2004	4.0%
1965	4.5%	1975	9.8%	1985	11.4%	1995	8.4%	2005	5.2%
1966	4.9%	1976	7.2%	1986	9.2%	1996	8.5%	2006	7.2%
1967	5.8%	1977	6.6%	1987	7.7%	1997	8.3%	2007	8.3%
1968	5.9%	1978	7.7%	1988	15.0%	1998	8.5%	2008	
1969	6.9%	1979	10.9%	1989	10.6%	1999	8.0%	2009	

FY 2007 and prior from Federal Reserve. FY 2008 and after from Global Insight, Second Quarter 2008, Trend Forecast.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Historical			Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	4.0%	8.3%	5.8%	1.8%	4.2%	7.8%
10 Years	4.0%	8.7%	6.8%	1.9%	4.4%	8.6%
Full Period	4.0%	17.5%	8.4%	3.2%	5.0%	11.8%

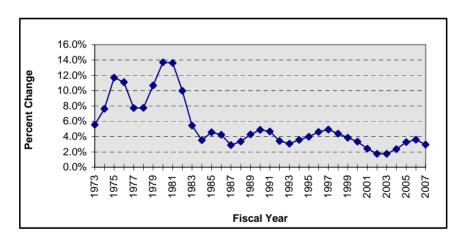
# HISTORICAL DATA PHOENIX CPI GROWTH RATE (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960	1970		1980	13.7%	1990	4.9%	2000	3.4%
1961	1971		1981	13.6%	1991	4.7%	2001	2.4%
1962	1972	6.1%	1982	10.0%	1992	3.4%	2002	1.8%
1963	1973	5.6%	1983	5.5%	1993	3.1%	2003	1.7%
1964	1974	7.6%	1984	3.5%	1994	3.6%	2004	2.4%
1965	1975	11.7%	1985	4.6%	1995	4.0%	2005	3.3%
1966	1976	11.1%	1986	4.2%	1996	4.6%	2006	3.6%
1967	1977	7.7%	1987	2.9%	1997	4.9%	2007*	3.0%
1968	1978	7.7%	1988	3.4%	1998	4.4%	2008	
1969	1979	10.7%	1989	4.3%	1999	3.9%	2009	

<sup>\*</sup> Estimate

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Histo	rical		Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	1.7%	3.6%	2.8%	0.7%	2.0%	3.5%
10 Years	1.7%	4.4%	3.0%	0.9%	1.8%	3.9%
Full Period	1.7%	13.7%	5.5%	3.3%	2.7%	10.9%

# HISTORICAL DATA US HOUSING START GROWTH RATE (Annual Percent Change)

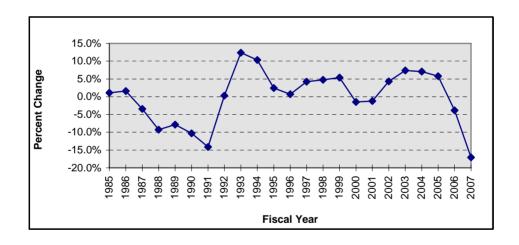
#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960	1970	1980		1990	-10.3%	2000	-1.5%
1961	1971	1981		1991	-14.1%	2001	-1.2%
1962	1972	1982		1992	0.3%	2002	4.3%
1963	1973	1983		1993	12.4%	2003	7.4%
1964	1974	1984		1994	10.3%	2004	7.1%
1965	1975	1985	1.1%	1995	2.4%	2005	5.8%
1966	1976	1986	1.6%	1996	0.7%	2006	-3.8%
1967	1977	1987	-3.4%	1997	4.2%	2007*	-17.1%
1968	1978	1988	-9.3%	1998	4.7%	2008	
1969	1979	1989	-7.9%	1999	5.4%	2009	

FY 2006 and prior from U.S. Bureau of Census. \* FY 2007 estimate and after from Global Insight, Second Quarter 2007,

Trend Forecast.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Historical			Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	-17.1%	7.4%	-0.1%	10.5%	-11.8%	7.3%
10 Years	-17.1%	7.4%	1.1%	7.5%	-5.2%	7.1%
Full Period	-17.1%	12.4%	0.0%	7.6%	-10.1%	7.3%

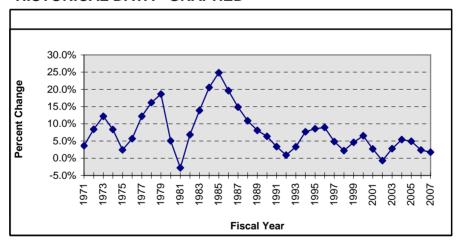
## HISTORICAL DATA SKY HARBOR PASSENGER TRAFFIC GROWTH RATE (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1000	10-0		4000		4000	2 424		2 = 2/
1960	1970		1980	5.0%	1990	6.4%	2000	6.5%
1961	1971	3.6%	1981	-2.8%	1991	3.4%	2001	2.7%
1962	1972	8.4%	1982	6.8%	1992	0.9%	2002	-0.7%
1963	1973	12.2%	1983	13.9%	1993	3.3%	2003	2.8%
1964	1974	8.4%	1984	20.6%	1994	7.7%	2004	5.4%
1965	1975	2.4%	1985	24.8%	1995	8.6%	2005	4.9%
1966	1976	5.7%	1986	19.6%	1996	8.9%	2006	2.4%
1967	1977	12.2%	1987	14.8%	1997	4.8%	2007*	1.8%
1968	1978	16.1%	1988	10.9%	1998	2.2%	2008	
1969	1979	18.7%	1989	8.1%	1999	4.6%	2009	

<sup>\*</sup> Historical data FY 2006 and prior obtained from Phoenix Sky Harbor International Airport. FY 2007 and after ADOT staff estimates.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Historical			Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	1.8%	5.4%	3.5%	1.6%	2.0%	5.2%
10 Years	-0.7%	6.5%	3.3%	2.1%	1.5%	5.5%
Full Period	-2.8%	24.8%	7.7%	6.3%	2.0%	17.2%

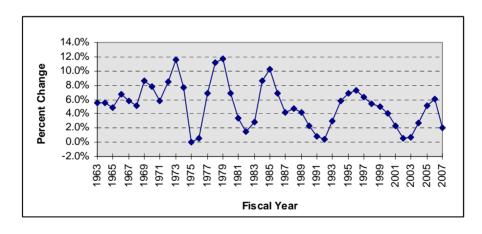
# HISTORICAL DATA - MARICOPA COUNTY TOTAL NON-FARM EMPLOYMENT GROWTH RATE (Annual Percent Change)

#### **HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1960		1970	7.8%	1980	6.9%	1990	2.3%	2000	4.0%
1961		1971	5.9%	1981	3.4%	1991	0.9%	2001	2.3%
1962		1972	8.5%	1982	1.5%	1992	0.4%	2002	0.6%
1963	5.5%	1973	11.6%	1983	2.9%	1993	3.0%	2003	0.7%
1964	5.5%	1974	7.6%	1984	8.6%	1994	5.8%	2004	2.7%
1965	4.9%	1975	0.0%	1985	10.2%	1995	6.9%	2005	5.1%
1966	6.8%	1976	0.5%	1986	6.9%	1996	7.2%	2006	6.1%
1967	5.8%	1977	6.9%	1987	4.1%	1997	6.3%	2007*	2.1%
1968	5.1%	1978	11.1%	1988	4.7%	1998	5.4%	2008	
1969	8.6%	1979	11.8%	1989	4.1%	1999	5.0%	2009	

FY 2006 and prior from Bureau of Labor Statistics. FY 07 and after ADOT staff estimates.

#### **HISTORICAL DATA - GRAPHED**



#### **HISTORICAL DATA - ANALYSIS**

	Historical			Std.	80%	Range
Period	Min.	Max.	Mean	Dev.	Lower	Upper
5 Years	0.7%	6.1%	3.3%	2.2%	1.3%	5.7%
10 Years	0.6%	6.1%	3.4%	2.0%	0.7%	5.5%
Full Period	0.0%	11.8%	5.2%	3.0%	0.8%	8.6%